

**Vermont Department of Environmental Conservation
Drinking Water & Groundwater Protection Division**

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Agency of Natural Resources

January 2, 2015

***** NEW MONITORING SCHEDULES - 2015 & 2016 *****

Dear Public Water Systems (Community and Non-Transient Non-Community):

Enclosed is your system's new monitoring schedule for 2015. The schedule reflects current monitoring requirements which take into account any waivers that were granted/denied/revoked and any reduced or increased monitoring requirements. You are **required** to monitor for each of the chemical groups/contaminants listed on the 2015 schedule.

The 2016 monitoring schedule is provided only to help you **plan and budget** for monitoring in 2016. We will send you a new 2016 monitoring schedule in December of 2015 which may include any changes in monitoring requirements that are made during 2015.

Monitoring schedules can also be found on the Drinking Water & Groundwater Protection Division's website (www.drinkingwater.vt.gov) and are updated quarterly to reflect any changes in your schedule and sampling points.

All water quality analyses must be conducted by a Laboratory Certified by the Vermont Department of Health for drinking water. You may access the certified lab list at the Division's website. ***Please remember, regardless of whether a lab submits test results to the Division, it is the responsibility of the water system to report sampling results to this Division.***

Important! If any monitoring is not completed by the end of each designated monitoring period on your schedule (month, quarter, or six month period) the Division must issue a Notice of Alleged Violation (NOAV) requiring the water system to issue Public Notice for failure to monitor. We highly recommend that you sample early in the monitoring period so that you have sufficient time to resample if, for example, bottles are lost in transit or a sample is invalidated by the lab. Clearly indicate sample location, Facility ID, Sample Point ID and WSID number with your samples on your lab's chain of custody forms.

SPECIAL - MANGANESE MONITORING REQUIRED IN 2015. The Division and the Vermont Department of Health have recently established a Vermont Health Advisory for manganese at 0.3 mg/l to address health concerns. The current secondary maximum contaminant level established for Manganese at 0.05 mg/l only addresses concentrations that cause the water to be discolored and taste bad. Recent studies have shown potential neurological effects from consuming too much manganese. Of particular concern is manganese exposure in young children which can be further exacerbated with infants on formula which may already be fortified with manganese. In order to obtain current information about manganese levels, all Public Community and NTNC systems are required to perform manganese monitoring during 2015. Manganese is separately listed in the chemical monitoring section of the schedule unless already scheduled for 2015 as part of an inorganic chemical group. A sample needs to be taken from finished water from each/every entry point to the distribution system during the monitoring period listed on the schedule. If a system's finished water sampling results in a manganese concentration of 0.3mg/l or greater, a confirmation sample will be required. If the confirmation sample comes back above 0.3 mg/l the Division plans to work with the system to address treatment for manganese. Please see our website at www.drinkingwater.vt.gov/pcwswqmonitoring.htm for more information.

Monitoring schedule sampling information details for the different types of contaminants:**Distribution System Monitoring (Total Coliform, Lead & Copper, Disinfection By-Products)**

Total Coliform samples must be taken in the distribution system at locations previously approved in your Bacteriological Sampling Plan. Record the category for each total coliform sample on the chain of custody forms that are sent to the lab along with each sample: Routine (RT) - Routine distribution sample(s) required by monitoring schedule and 5 distribution samples required the following month after a TC+ Routine sample. Repeat (RP) – distribution samples required immediately after TC+ Routine Sample. Triggered Source (TG) – groundwater source sample(s) required immediately after TC+ routine sample. Note that samples coded as Special (SP) do not count for compliance purposes.

When using a chemical disinfectant, systems must also measure and record free chlorine residual (or total residual if free is not detectable) at the same time and locations as Total Coliform samples. These results must be reported on your field sheets that are sent to the lab along with the sample(s) to be analyzed and also on your monthly operations report.

Lead & Copper samples must be taken in the distribution system at locations previously approved in your Lead and Copper Sampling Plan. These locations are identified by the system as being most at risk for elevated levels of Lead and Copper. All distribution system Lead and Copper samples are taken as first-draw tap samples (with faucet strainers left in place) after the water has stood motionless in the plumbing system for at least 6 hours.

Water systems are required to provide a copy of the lead and copper test results to all consumers whose homes/businesses were sampled (whether or not there was an exceedance) and comply with public education requirements when exceeding the lead action level (**at the 90th percentile**). All Public Community Water Systems must also include lead risk reduction language in their annual CCR. For more specific guidance documents, certification forms, and helpful templates please visit the Division's Website (www.drinkingwater.vt.gov) and/or contact the Lead & Copper Rule Coordinator.

Disinfection By-Products (DBP) Monitoring Policy: Public Community and Non-Transient Non-Community Water Systems which regularly, routinely, contain a chemical disinfectant (i.e., chlorine, chloramine, etc.), are required to conduct DBP monitoring for total trihalomethanes and the five regulated haloacetic acids at the time when the water contains the chemical disinfectant. This includes Systems that use a chemical disinfectant annually during the summer months. This monitoring requirement does not apply when a system introduces a disinfectant under a defined emergency condition for a short duration of time. This policy and monitoring approach is more stringent than what the Division has implemented in the past. The goal is to improve public health protection by reducing exposure to DBPs. Please contact the DBP Rule Coordinator to prepare a monitoring plan and set up a DBP monitoring schedule if this system fits these categories and DBP monitoring is missing from the 2015 schedule.

Stage 2 DBP Compliance Monitoring: Systems officially began Stage 2 DBP Compliance Monitoring on October 1, 2013 for the five regulated Haloacetic Acids (HAA5) and Total Trihalomethanes (TTHM). Some systems will conduct dual sampling (for both HAA5 and TTHM) at a single site, while others will sample for HAA5 at one site and TTHM at a different site. Now that a year has lapsed some systems qualify for reduced monitoring. Check the schedule for any changes in DBP monitoring frequency.

Use DBP sampling locations specified in your approved Stage 2 DBP Compliance Monitoring Plan and reprinted on your monitoring schedule. Record the Sample Point ID (Such as TH001, HA001, etc.), the Facility ID (DS001, DS002, etc.), and the Sample Location (using a 911 address, residence or building name, etc.) on the form sent to the lab with the samples. This is CRITICAL for compliance which is calculated as a Locational Running Annual Average for each sampling location. Monitoring & Reporting Violations will be issued for the use of unapproved sampling locations and for samples taken outside the specified monitoring period.

Long Term 2 (LT2) ESWTR: (Schedule 3 Systems ONLY) For surface water or GWUDISW (Subpart H) systems serving from 10,000 to 49,999 people it is important to note that your monitoring schedules do not yet reflect requirements for Cryptosporidium monitoring that will commence no later than October 2016. This is so because sampling plans are not themselves due until July 1, 2016. You will be notified well in advance of the planning deadline with instructions for how to prepare such a plan. Upon approval, schedules will be created detailing LT2 monitoring requirements and be reflected in your 2016 monitoring schedule.

Finished Water Monitoring

Chemical and Radionuclide samples must be taken at the entry point to the distribution system. This sample point is located after any treatment and storage and prior to the distribution system. Some systems without a sampling tap prior to distribution resort to taking entry point samples at the first tap. Please see your schedule for the sample point location specifics for your system.

NOTE: Testing for asbestos, cyanide and radium are not performed by the Vermont Department of Health Lab.

Raw Water Monitoring

Groundwater Rule: The Groundwater Rule requires groundwater systems to have a source sample tap installed before water treatment. Source water monitoring is required if total coliform is present in the distribution system (otherwise known as "triggered source monitoring" - TG). If you have not already done so, please ensure that your system installs a raw water sampling tap this year.

The following Division contacts can answer questions regarding specific rule monitoring.

Total Coliform & Groundwater Rule

David Love, Environmental Analyst
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Lead and Copper, Stage 2 DBPs, LT2

Doug Kievit-Kylar, Environmental Analyst
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Chemical Monitoring & Waivers – Chemicals, Rads, DBPs

Billy Kahn, Environmental Analyst
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Surface Water Treatment Rule

Julie Hackbarth, Compliance Manager
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Sincerely,


Billy Kahn, Environmental Analyst

Enc: 2015 & 2016 monitoring schedules
C: Water System Operator